Amendments to the Claims

- 1. (Cancelled)
- 2. (Currently amended) A compound of formula 1

$$CH_{2}-R_{3}$$
 $R_{4}-L$
 R_{4}
 R_{4}
 R_{4}

wherein R₁-R₂ is a radical of formula 2

$$R_5$$
 N
 N
 N
 R_6
 R_2

wherein R₂ is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety; R₅ is hydrogen, halogen, trifluoromethyl, or hydroxy; and R₆ is hydrogen, hydroxy or unsubstituted or substituted amino; and tautomeric forms thereof;

X is oxygen or sulfur;

R₃ is triazolylene, tetrazolylene, isoxazolylene, thienylene, isoxazolidinylene, or alkynylene, wherein a double bond or the triple bond, respectively, is connected to CH₂;

R₄ is an optionally substituted straight or branched chain alkylene group with 1 to 300 carbon atoms, wherein optionally

- (a) one or more carbon atoms are replaced by oxygen
- (b) one or more carbon atoms are replaced by nitrogen carrying a hydrogen atom, and an adjacent carbon atom is substituted by oxo, representing an amide function –NH-CO-;
- (c) one or more carbon atoms are replaced by oxygen, and an adjacent carbon atom is substituted by oxo, representing an ester function -O-CO-;

- (d) the bond between two adjacent carbon atoms is a double or a triple bond, representing a function -CH=CH- or -CEC-;
- (e) one or more carbon atoms are replaced by a phenylene, a saturated or unsaturated cycloalkylene, a saturated or unsaturated bicycloalkylene, a bridging heteroaromatic or a bridging saturated or unsaturated heterocyclyl group; and/or
- (f) two adjacent carbon atoms are replaced by a disulfide linkage -S-S-; and L is one or a plurality of same or different labels selected from a spectroscopic probe, a magnetic probe, a contrast reagent, selected from a fluorophore and a chromophore, a moiety which is one part of a specific binding pair which is capable of specifically binding to a partner selected from biotin, avidin, streptavidin, an amine, an activated carboxy group, an azide and a propiolic acid derivative, a moiety which is capable of generating hydroxyl radicals upon exposure to H₂O₂ and ascorbate, a moiety which is capable of generating reactive radicals upon irradiation with light, a moiety covalently attached to a solid support, a nucleic acid moiety or a derivative thereof capable of undergoing base-pairing with its complementary strand, a lipid or other hydrophobic moiety with membrane-inserting properties, a bond connecting R₄ to R₁ forming a cyclic substrate, and a further group -R₃-CH₂-X-R₁-R₂.

3. (Cancelled)

- 4. (Previously presented) The compound of formula 1 according to claim 2, wherein the saccharide moiety R_2 is a β -D-2'-deoxyribosyl, or a β -D-2'-deoxyribosyl being incorporated into a single stranded oligodeoxyribonucleotide having a length of 2 to 99 nucleotides, wherein the radical of formula 2 occupies any position within the oligonucleotide sequence.
- 5. (Previously presented) The compound of formula 1 according to claim 2, wherein R_2 is hydrogen, R_5 is hydrogen, R_6 is unsubstituted amino, and X is oxygen.
- 6. (Withdrawn) The compound of formula 1 according to claim 1, wherein R_1 - R_2 is a radical of formula 3

$$R_2$$
 N
 R_6
 R_6

wherein R_2 is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety; and R_6 is hydrogen, hydroxy or unsubstituted or substituted amino; and tautomeric forms thereof.

7. (Withdrawn) The compound of formula 1 according to claim 1, wherein R_1 - R_2 is a radical of formula 4

wherein R_2 is hydrogen, alkyl of 1 to 10 carbon atoms, or a saccharide moiety; and R_7 and R_8 are both independently of one another hydrogen, halogen, lower alkyl with 1 to 4 carbon atoms, amino, or nitro.

- 8. (Previously presented) The compound of formula 1 according to claim 2, wherein R₃ is triazolylene, tetrazolylene, isoxazolylene, thienylene, or isoxazolidinylene.
- 9. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is triazolylene.
- 10. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is tetrazolylene.

- 11. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is isoxazolylene.
- 12. (Previously presented) The compound of formula 1 according to claim 8 wherein R₃ is thienylene.
- 13. (Previously presented) The compound of formula 1 according to claim 8 wherein R_3 is isoxazolidinylene.
- 14. (Previously presented) The compound of formula 1 according to claim 2, wherein R_3 is 1-alkynylene.
- 15. (Previously presented) The compound of formula 1 according to claim 2, wherein R_4 is a straight chain alkylene group with 2 to 25 carbon atoms, a straight chain polyethylene glycol group with 4 to 100 ethyleneoxy units, or a straight chain alkylene group with 2 to 25 carbon atoms wherein two or more carbon atoms are replaced by an amide function –NH-CO-, optionally attached to the group R_3 by a –CH=CH- or –CEC- group.
- 16. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a branched chain alkylene group comprising a polyethylene glycol group of 3 to 6 ethylene glycol units and one or more alkylene groups wherein carbon atoms are replaced by amide bonds, and further carrying substituted amino and hydroxy functions.
- 17. (Currently amended) The compound of formula 1 according to claim 2, wherein R_4 is a branched chain alkylene group having a dendritic structure, wherein amine, carboxamide and ether functions replace carbon atoms of the alkylene group.
- 18. (Previously presented) The compound of formula 1 according to claim 2, wherein L is a further group $-R_3-CH_2-X-R_1-R_2$.

- 19. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a straight chain alkylene group of 10 to 40 carbon atoms wherein 3 to 12 carbon atoms are replaced by oxygen, one or two carbon atoms are replaced by 1,4-triazolidene units, and optionally one carbon atom is replaced by a 1,4-phenylene unit.
- 20. (Previously presented) The compound of formula 1 according to claim 2, wherein R_4 is a straight chain alkylene group of 10 to 40 carbon atoms optionally substituted by oxo wherein 3 to 12 carbon atoms are replaced by oxygen and one or two carbon atoms are replaced by nitrogen.
- 21. (Previously presented) The compound of formula 1 according to claim 2, wherein R₄ is a straight chain alkylene group of 6 to 40 carbon atoms wherein 2 to 12 carbon atoms are replaced by oxygen and one or two bonds between two adjacent carbon atoms is a double bond.
- 22. (Previously presented) The compound of formula 1 according to claim 2, wherein R_6 is amino and L is a bond connecting R_4 to R_6 .
- 23. (Previously presented) The compound of formula 1 according to claim 2, wherein L is methotrexate.
- 24. (Previously presented) The compound of formula 1 according to claim 2, wherein L is a plurality of same or different labels.
- 25. (Previously presented) The compound of formula 1 according to claim 24, wherein L is two different labels.
- 26. (Cancelled)
- 27. (Currently amended) A method for the synthesis of a compound of the formula 1 according to claim 2, which comprises reacting a compound of the formula R_2 - R_1 -X- CH_2 - R_3 - R_4 , wherein R_1 , R_2 , R_3 and X have the meaning as defined in claim 2 and R_4 is a polyfunctional

residue having two or more reactive nucleophilic or electrophilic groups, with a suitable reagent introducing one or more labels L.

- 28. (Currently amended) A method according to claim 27 wherein the reactive nucleophilic or electrophilic groups earry in R₄ are protected by separately deprotectable removable protection groups, one protection group is separately deprotected and a label attached to it or the linker R₄ further extended the method comprising the further steps of
- (a) separately deprotecting one protected reactive nucleophilic or electrophilic group and attaching a label to it or extending the linker R₄, another protection group is separately deprotected and a label attached to it or the linker R₄ further extended,
- (b) separately deprotecting another protected reactive nucleophilic or electrophilic group and attaching a label to it or extending the linker R₄, and
- (c) repeating the steps of deprotection and label attachment or linker extension repeated depending on the number of until all protected reactive nucleophilic and electrophilic groups are removed.
- 29. (Previously presented) A compound of the formula 1

wherein R₁-R₂ is a radical of formula 2

$$R_5$$
 N
 N
 R_6
 R_2

wherein R₂ is hydrogen, R₅ is hydrogen and R₆ is unsubstituted amino; X is oxygen; R₃ is triazolylene, tetrazolylene, isoxazolylene, thienylene, isoxazolidinylene or alkynylene, wherein a double bond or the triple bond, respectively, is connected to CH₂;
R₄ is an optionally substituted straight or branched chain alkylene group with 1 to 300 carbon atoms, wherein optionally

- (a) one or more carbon atoms are replaced by oxygen
- (b) one or more carbon atoms are replaced by nitrogen carrying a hydrogen atom, and an adjacent carbon atom is substituted by oxo, representing an amide function –NH-CO-;
- (c) one or more carbon atoms are replaced by oxygen, and an adjacent carbon atom is substituted by oxo, representing an ester function –O-CO-;
- (d) the bond between two adjacent carbon atoms is a double or a triple bond, representing a function -CH=CH- or -CEC-;
- (e) one or more carbon atoms are replaced by a phenylene, a saturated or unsaturated cycloalkylene, a saturated or unsaturated bicycloalkylene, a bridging heteroaromatic or a bridging saturated or unsaturated heterocyclyl group; and/or
- (f) two adjacent carbon atoms are replaced by a disulfide linkage -S-S-; and L is amino or azido.
- 30. (Currently amended) A compound according to claim 29 wherein R₄ is a straight chain alkylene group of 10 to 40 carbon atoms optionally substituted by oxo wherein up to 12 carbon atoms are replaced by oxygen and zero, one or two carbon atoms are replaced by nitrogen.
- 31. (Currently amended) A method for detecting and manipulating a protein of interest, which comprises contacting an AGT fusion protein comprising the protein of interest with an AGT substrate carrying a label, and detecting and optionally further manipulating the AGT fusion protein using the label in a system designed for recognising or handling the label, and wherein the AGT substrate carrying the label is a compound of formula 1 according to claim 2.